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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/334,193	06/16/1999	DENNIS J. O'SHAUGHNESSY	1375P1	5063
24959	7590	12/11/2003		
PPG INDUSTRIES INC INTELLECTUAL PROPERTY DEPT ONE PPG PLACE PITTSBURGH, PA 15272			EXAMINER MCNEIL, JENNIFER C	
			ART UNIT	PAPER NUMBER
			1775	28
DATE MAILED: 12/11/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

CLD 28

# Office Action Summary

Application N .

09/334,193

Applicant(s)

O'SHAUGHNESSY, DENNIS J.

Examiner

Jennifer C McNeil

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 42-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-18, 22-34, 42-45 is/are allowed.
- 6) ☒ Claim(s) 19-21 is/are rejected.
- 7) ☒ Claim(s) 1,9,12,15,18,19,22,23,26,29 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is in response to the after-final amendment of November 10, 2003. Upon closer consideration of the remaining claims the following comments are made.

#### *Claim Objections*

Claims 9, 12, 15, 18, 19, 22, 23, 26, 29, 42, and 43 are objected to because of the following informalities:

The following suggestions are made to the claims for grammar and clarification.

For clarification of claim 1, it is suggested to remove the term "and" from the Markush grouping in lines 17-27. Also, in place of semicolons, use commas. For example: lines 17-20 would read -a protective layer of at least two films selected from the group consisting of metal-containing films which are from different transition metals of Groups 4, 5, 6, or 10 of the Periodic Table of Elements, silicon containing films, metal and silicon films, films of metal and metal-oxy materials,--.

Claim 9, line 2, in place of "comprises a zinc oxide film; a zinc oxide, tin oxide film or a zinc stannate film", the following is suggested: --is selected from the group consisting of a zinc oxide film, a zinc oxide, tin oxide film, and a zinc stannate film--.

Claim 12, line 2, change the semicolon to a comma.

Claim 12, line 3, add a comma after "tin oxide film".

Claim 15, line 3, add -a—before "zinc.

Claim 15, line 4, change the semicolon to a comma, and add -a—before "zinc" and "second".

Claim 15, line 5, should the second instance of "the" be -their--?

Claim 15, line 6, should "same" be deleted?

Claim 18, lines 4 and 5, should -a- be inserted before the first two instances of "zinc"?

Claim 18, line 7, should "first" be inserted before "zinc stannate"?

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Claim 19, line 3, should "second" be deleted?

Claim 19, line 3, should "comprises" be replaced with "is selected from the group consisting of a zinc oxide film, a zinc oxide, tin oxide film, and a second zinc stannate film".

Claims 22 and 23, should the language be changed like that of claim 1?

Claim 23, lines 8, should "a" be added before "zinc oxide"?

Claim 23, line 9, please remove "the second dielectric film".

Claim 26, line 12, should "a" be added before "zinc oxide film" and "zinc stannate" film"? Should the semicolon be changed to a comma?

Claim 29, line 17, should "have" be "has" or "having"?

Claim 29, line 18, should "second" be "first"?

Claim 42, after "50 angstroms" should the comma be deleted?

Claim 43, should "for the films" be deleted" and should "film" be "films"?

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 recites the limitation "the second dielectric film of the second dielectric layer and the second dielectric film of the third dielectric second layer" in lines 1-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "and third dielectric film of the second dielectric layer" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

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Claim 21 recites that the protective layer is a titanium metal film. However, claim 1 defines the protective layer as at least two films. What is the second film?

*Allowable Subject Matter*

Claims 1-18, 22-34, and 42-45 are allowed.


Claims 19-21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer C McNeil whose telephone number is 703-305-0553. The examiner can normally be reached on 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 703-308-3822. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



JCM  
December 5, 2003